Preliminary Report

Fort Worth, TX

HWY21FH005

(4 pages)

PRELIMINARY REPORT
HIGHWAY
HWY21FH005

The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.

On Thursday, February 11, 2021, about 6:00 a.m. central standard time, a multivehicle crash occurred in the southbound toll lanes of Interstate 35 West (I-35W), in Fort Worth, Tarrant County, Texas. The crash happened near the exit to Northside Drive and involved about 130 vehicles.[1] The southbound traffic lanes consisted of two toll lanes and three general-use lanes. The posted speed limit was 75 mph for the toll lanes and 65 mph for the general-use lanes. The southbound toll lanes were separated from the northbound toll lanes by a 42-inch-high sloped concrete barrier and from the southbound general-use lanes by a 36-inch-high back-to-back concrete rail barrier (figure 1).

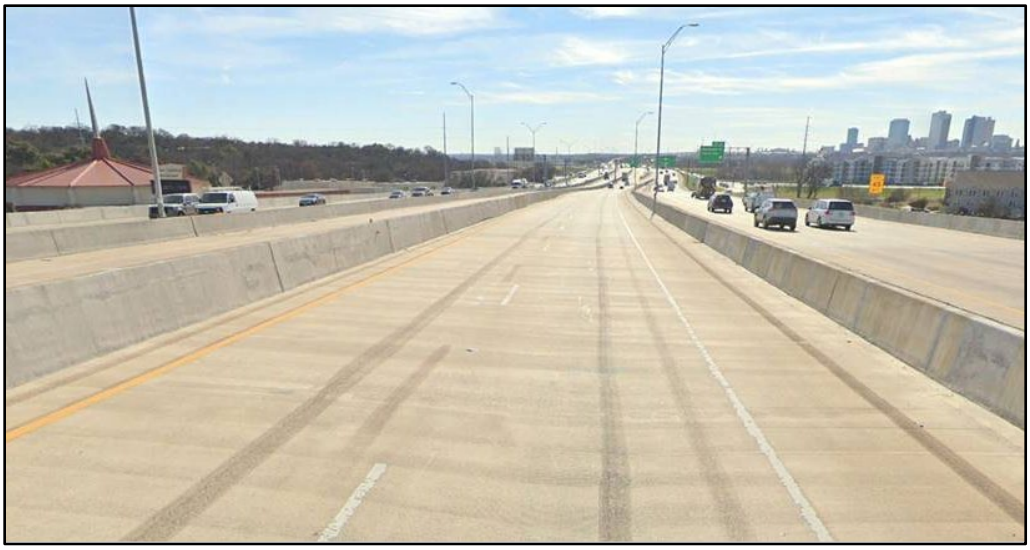

Figure 1. Approximate location of crash, looking south. (Source: Google Earth image from January 2020)

In the days before the crash, the area had experienced 36 consecutive hours of below-freezing temperatures. In anticipation of forecast freezing rain and sleet, NTE Mobility Partners Segments 3 (NTEMP S3) reported that they had pretreated the traffic lanes with an Ice Slicer NM

[1] The Fort Worth Police Department, the local investigating authority, documented the crash using the state's CR-3 crash report. The report uses "traffic units," which treat truck-tractor semitrailer combination vehicles as two units—the power unit (the truck-tractor) and the towed unit (the semitrailer). The police department's report states that 148 traffic units were involved in the crash, including 32 truck-tractor semitrailer combination units, 114 passenger vehicle units, and 2 units classified as pedestrians.

brine solution.[2] The solution was applied to the two southbound toll lanes in the vicinity of the crash on February 9 at 10:12 a.m.

About 4 hours before the crash, the weather station at Fort Worth Meacham International Airport, about 3 miles northwest of the crash site, reported light freezing rain and freezing mist. At 3:40 a.m., the dynamic message signs managed by NTEMP S3 along the southbound toll lanes began displaying the message, "ICY CONDITIONS EXIST / PLEASE USE CAUTION." The message was based on information from an earlier crash at 3:08 a.m., when icy road conditions existed at I-35W and Western Center Boulevard, about 5 miles north of the crash site.

The crash involved a combination of commercial and passenger vehicles and covered a segment of roadway approximately 1,100 feet long (figure 2). As a result of the crash, 6 people were fatally injured. Two of the fatally injured people were pedestrians who exited their vehicles and were struck on the road. The other fatally injured people had remained inside their vehicles. Thirty-six vehicle occupants were transported to area hospitals for treatment of their injuries.

Figure 2. Crash scene (Source: Adapted from Google Earth).

[2] (a) Segments 3 refers to I-35W. NTE Mobility Partners, through a separate legal entity, operates and maintains other segments along Interstate 820 and State Highway 183 in the Fort Worth area. (b) Ice Slicer NM (also known as Ice Slicer CB) is available as a commercial product and comprises sodium chloride, magnesium chloride, potassium chloride, and calcium chloride. Sodium chloride makes up 90 to 98 percent of the brine solution.

NTEMP S3 was responsible for operations and maintenance in the I-35W right-of-way, which included toll lanes, general-use lanes, and frontage roads. The crash occurred in a segment of the road that had opened to traffic on April 5, 2018.

The National Transportation Safety Board (NTSB) is conducting a focused investigation to examine the road treatment strategies used to address the freezing conditions. NTEMP S3, the Texas Department of Transportation, the Fort Worth Police Department, the Fort Worth Fire Department, and the Metropolitan Area EMS Authority are supporting the NTSB in the investigation.